

Markman Reply Brief Part Two

Thus, assuming *arguendo* that the claims on their face did not already require the presence of added acids in addition to the natural base juice acids in the final beverage, it is necessary in order to preserve the validity of the claims that the “acid component comprising a mixture of citric acid and malic acid” be construed to require the presence of added acids to solubilize calcium and impart desirable taste properties.

C. P&G’s Interpretation of the Disputed Phrase Conflicts with the Representations Made During Patent Prosecution

Although Coca-Cola devoted almost nine pages of its opening brief to a comprehensive and thorough discussion of the prosecution history of the ‘847 patent insofar as it bears on the interpretation of the disputed “acid component” phrase (see pages 18-25 and 34-36 of Coca-Cola’s opening brief), P&G devotes a mere three sentences of its brief to this critical piece of intrinsic evidence. P&G merely conclusorily asserts that “nothing in the prosecution history warrants a construction of the” disputed phrase “contrary to the plain meaning proposed by P&G.” P&G Br. at 17. P&G’s position, however, is flatly contradicted by the prosecution record.

In an attempt to downplay the significance of the prosecution history, P&G contends that it “distinguished the relevant prior art by reference to the composition of the final products taught by such art, and therefore did not rely on the presence or absence of ‘added acids’ as a distinguishing characteristic” in attempting to overcome such art. P&G Br. at 17. P&G’s argument, however, bears several sins of omission that undermine the credibility of its position.

1. P&G’s Beverage Demonstrations and Accompanying Remarks Disclaimed Reliance on the Base Juice Acids Alone

First, P&G fails to inform the Court that it obtained allowance of its claims not merely because of the way in which the remarks accompanying its amendment distinguished the prior art references cited by the examiner, but also because of representations it made about the scope

of the claimed invention and, in particular, because of demonstrations P&G conducted during an interview with several examiners.

Consistent with the disclosure in the technical background of the patent to the effect that the direct addition of calcium alone to fruit juice did not work because the natural acids in the base juice inhibited solubilization, P&G made a point of demonstrating this fact to the examiners in the interview. Two of the demonstrations conducted were designed to be “representative of what occurs during the direct addition of calcium hydroxide to orange juice or orange juice concentrate in a large blend tank typically used in commercial citrus juice operations.” Exh. 7 at ¶ 7. As discussed in Mr. Dake’s declaration, it was “very difficult to dissolve” calcium hydroxide added directly to the orange juice without added acids and the resulting juice became “green” and slowly developed “a fishy, amine odor.” *Id.* When the level of added calcium was doubled, not only was it difficult to dissolve but the juice color darkened, a gel formed out of the juice, and a fishy, amine odor quickly developed. *Id.* This was contrasted with a successful demonstration of P&G’s premix method where citric and malic acids were dissolved in water, calcium carbonate and liquid sucrose were added to provide a premix solution, and the premix solution was “add[ed] and mix[ed] together” with the concentrated juice, pulp, oils, essences, and other materials. *Id.* at ¶¶ 3-5.

P&G’s attorney also submitted an outline to the examiners at the interview summarizing the problems of direct addition of calcium hydroxide alone to juice/concentrate without the use of added acids while asserting that P&G’s premix method achieved the objective of imparting the claimed level of calcium to the juice while solving these problems. Exh. 6 at 1-2. P&G likewise argued in its amendment that “[d]irect addition of calcium sources does not solve” such “problems” like calcium solubilization, deterioration of juice quality (*e.g.*, color generation and

gel formation), generation of unpleasant tastes or smells, and the removal of desirable juice volatiles. Exh. 8 at 5.

As a result of such demonstrations and P&G's remarks accompanying its amendment, the examiner allowed these product claims to issue. The Examiner Interview Summary Record confirms that P&G compared its premix procedure "with various procedures of direct addition" and concluded that the "[p]re-mix procedure appears to be preferred or only workable procedure comparing [sic: compared to] direct addition." Exh. 5. The examiner also acknowledged that the first two pages of P&G's attorney's outline were discussed with the examiners. *Id.*

As discussed at pages 20-22 of Coca-Cola's opening brief, the prosecution history reveals that P&G's demonstrations and remarks were not limited to the method claims pending in its application. The Dake declaration makes clear that "single-strength samples of orange and grapefruit juice beverages of the present invention . . . were offered to the Examiners." Exh. 7 at ¶ 3 (emphasis added). Those samples "were prepared according to the premix method of the present invention." *Id.* at ¶ 5. The P&G attorney outline submitted to the examiners at the interview stated that the "[o]bjective" of the invention was to "supplement products containing at least 45% juice with high levels of calcium." Exh. 6 at 1 (emphasis added). As evidence that the objective was achieved, the attorney outline proposes to "[o]ffer products made by premix method," specifically "orange" and "grapefruit" juice. *Id.* at 2 (emphasis added).

While P&G's remarks accompanying its amendment purported to separately discuss the product claims and the then-pending method claims, it is nonetheless apparent that P&G intended any remarks made in connection with the method claims to apply to the product claims as well. For example, the first heading in P&G's remarks is entitled "The Calcium-Supplemented Juice Products of the Present Invention." Exh. 8 at 2 (emphasis). The

immediately following section, in which the demonstrations conducted with the examiners are principally discussed, is entitled “The Premix Method of the Present Invention *Provides These Calcium-Supplemented Juice Products*, but Without the Problems Caused by Direct Addition of Calcium Sources to Juice or Juice Concentrate.” *Id.* at 3 (emphasis in original omitted in part).

In fact, P&G is on record as having admitted that the purpose of the beverage demonstrations was to distinguish both the claimed product and process claims from the direct calcium addition approach. The ‘847 patent-in-suit containing the beverage composition claims and the related U.S. Patent No. 4,919,963 (“the ‘963 patent”) (Exh. 13) containing the method claims involve the same purported discovery: that unacceptable fruit juice characteristics such as poor taste, odor, and poor calcium solubility could be avoided through the use of a mixture of added citric acid and malic acid present in the final fruit juice beverage. During prosecution of the related ‘963 patent, P&G specifically referred to the demonstrations made in the course of prosecuting the ‘847 parent patent and stated that “the product and process problems associated with direct addition of calcium from the claimed sources to fruit juices were demonstrated.” Exh. 29 at 7 (emphasis added). Thus, there is no basis for P&G to contend that the demonstrations had no bearing on the allowance of the product claims.

The only purpose for conducting these demonstrations and placing such remarks in the prosecution record was to distinguish its claimed inventions from any beverages that were supplemented with calcium without the use of added acids. A reasonable competitor reviewing the public record would understandably conclude that the claimed invention did not cover direct calcium-supplemented fruit juice beverages that did not contain added acids. *See Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995 (Fed. Cir. 2003).

**2. P&G's Arguments Regarding the Prior Art
Confirms that the Beverage Claims Require Added Acids**

Second, while P&G contends that it never relied on an “added acids” distinction to overcome the prior art, P&G Br. at 17, P&G fails to inform the Court of the reason why there was no need for P&G to discuss the added acids distinction at length during patent prosecution in connection with the Sperti and Kaji references cited by the examiner. Sperti, for example, taught the addition of citric and malic acids to a base juice in a 99% to 1% ratio. Exh. 3 at col. 5, lns. 9-20; *see also* Exh. 2 at 4 (“Sperti et al is directed to a citrus drink which is formulated with added calcium chloride, sucrose and citrate.”). Kaji similarly taught the addition of equal parts citrate and malate. Exh. 4 at 2. This is confirmed by Mr. Dake’s reproduction of the teaching of Kaji as employing added citric and malic acids in essentially a 50:50 ratio. Exh. 7 at ¶ 11. As a result, since the beverages of both Sperti and Kaji contained added acids, it would have been both inaccurate and misleading for P&G to have argued to the examiner that the claimed invention differed from these references on the ground that the claims required the presence of added acids in the final beverage but the references did not. P&G’s silence on this point is understandable, as it was not in P&G’s interest to point out this similarity to the examiner. Its failure to do so, however, does not change the scope of the claimed invention.

Nonetheless, while P&G may not have expressly relied on an “added acids” distinction to distinguish the prior art, it indirectly did so by focusing on alleged differences in the claimed ratio of such added acids taught by the prior art. In order to overcome Sperti, P&G instead affirmatively argued that the claimed ratio of the added mixture of citric acid to malic acid in the range of 5:95 to about 90:10 was not disclosed or taught by Sperti’s citric to malic ratio of 99:1. As discussed at pages 22-24 of Coca-Cola’s opening brief, P&G’s remarks in this regard amount to an unmistakable concession that the claimed ratio of citric acid to malic acid in the claims

refers to the ratio of added citric acid and malic acid prior to mixing with the natural acids in the base juice. Had P&G intended the claimed ratio of the mixture of citric acid and malic acid to apply to the ratio of acids in the base juice alone, it would otherwise have distinguished Sperti on that ground, yet it did not. Having adopted one construction of its claims to distinguish the prior art in order to gain allowance of its claims, it may not now advocate a different interpretation before this Court. *See Hockerson-Halberstadt, Inc. v. Avia Group, Int'l, Inc.*, 222 F.3d 951, 957 (Fed. Cir. 2000) (public entitled to rely upon the applicant's remarks during prosecution that disavow a particular aspect of a claim's meaning).

D. P&G's Interpretation of the Disputed Phrase Conflicts with Other Admissions Made by P&G and Its Licensees

As discussed at pages 25-28 of Coca-Cola's original brief, P&G has repeatedly and consistently characterized the invention claimed in the '847 patent in related patent proceedings and in other public documents in precisely the manner proposed by Coca-Cola. Such admissions included statements during the European counterpart patent prosecution where P&G characterized the inventive feature of its claimed beverage as the presence of a precisely defined amount of a particular acid component added to the base juice. Exh. 15 at 18, ln. 36 to 19, ln. 3; Exh. 15 at 17, lns. 23-30. Tropicana, P&G's exclusive licensee, likewise characterized P&G's '847 beverage as one involving fruit juice mixed with added acids, Exh. 18 at col. 1, ln. 66 - col. 2, ln. 10.

P&G's pre-litigation admissions thus provide further corroboration that Coca-Cola's interpretation of the claimed "acid component comprising a mixture of citric acid and malic acid" phrase is the correct one.

III. “BEVERAGE” IN THE CLAIM PREAMBLE REQUIRES THAT THE CLAIMED INVENTION BE DRINKABLE BUT DOES NOT OTHERWISE IMPOSE ANY TASTE, SMELL, OR APPEARANCE CHARACTERISTICS

P&G maintains that the patent specification defines the term “fruit juice beverage” as a “fruit juice product which is in a single-strength, ready-to-serve, drinkable form.” P&G Br. at 2, 17. Coca-Cola agrees, and has similarly argued in its opening brief. Coca-Cola Br. at 36. Indeed, both parties cited the same dictionary definition of “beverage” as meaning “a drinkable liquid.” MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY (11th ed. 2003) (Exh. 21).

While P&G advocates what might otherwise be an acceptable definition of “fruit juice beverage” meaning a fruit juice product “in a single-strength, ready-to-serve, drinkable form,” it goes on in its brief to advocate a further gloss on its construction of the term. P&G Br. at 18-20 & n.12. P&G would have this Court go further and read into the claim additional language not found in its stated definition, namely, that it have a desirable taste, odor, and appearance. The problem with P&G’s argument is that neither the patent claims nor the intrinsic evidence supports such a construction.

The language of the claims fails to recite a beverage “having desirable taste, odor, and appearance.” The dictionary definition of “beverage” requiring that it be a “drinkable liquid” does not in and of itself impose any desirable taste, odor, and appearance characteristics on the beverage.

While P&G, as its own lexicographer, could have engrafted desirable taste, odor, and appearance characteristics into the definition of “fruit juice beverage” set forth in the ‘847 patent specification, it avoided any mention whatsoever of such characteristics in its recited definition. As a result, this Court should accept the definition of “fruit juice beverage” actually provided by P&G which, consistent with the ordinary dictionary definition of “beverage,” merely requires that it be in a “*drinkable form*.”

P&G attempts to rely upon general statements about the object of the invention to justify reading into the claims a requirement for desirable taste, odor, and appearance. P&G Br. at 18. However, as Coca-Cola has argued in its opening brief, “desirable taste qualities” are objectively imparted to the claimed invention, not through the definition of the word “beverage,” but through other language in the claims. Coca-Cola Br. at 37. The patent specification unambiguously states that it is the “acid component” used to solubilize the calcium that is the “key component” for “providing desirable taste properties.” Exh. 1 at col. 5, lns. 56-59. The presence of an acid component in the fruit juice beverage that is a mixture of natural base juice acids and added citric and malic acids used to solubilize the calcium in the premix will avoid cooked/browned off-flavors, residual carbonation, foaming, calcium precipitation, and undesirable juice color and smell. See, e.g., Exh. 6 at 1-2; Exh. 8 at 3-5. Other claimed elements such as the level of sugar content, the amount of chloride ion, and the amount of solubilized calcium define objective limits to implicitly ensure a certain level of acceptable taste, smell, and appearance. There is simply no basis in the record, however, to impose any further limitations on the taste, smell, or appearance of the claimed “beverage.”

P&G’s reliance on the prosecution history to permit reading in taste, odor, and appearance limitations not set forth on the face of the claim is likewise unavailing. At no place in the prosecution history did P&G ever define “beverage” before the examiner as requiring a certain taste, odor, and appearance. Moreover, the cited Sperti and Kaji references were not distinguished because they did not disclose “beverages,” but because they neither disclosed nor taught the claimed beverage. The teaching of Sperti was distinguished, *inter alia*, because the use of calcium chloride to fortify the juice to the level of calcium in milk resulted in chloride levels higher than the claimed maximum of about 0.07% chloride. Exh. 8 at 8. Kaji was

distinguished, *inter alia*, because it did not contain “at least 45% juice as defined in Claims 1 to 18” and because it contained a calcium content in excess of the claimed maximum level of 0.26% which can cause the calcium to precipitate out. Exh. 8 at 9. There is absolutely nothing in the prosecution history to support the conclusion that any taste, smell, or appearance characteristic is required except as provided by the recited levels of solubilized calcium, acid component, fruit juice, sugar content, and chloride ion.

Moreover, had P&G intended the term “beverage” to include within it a requirement for desirable taste, odor, and appearance, it would have been incumbent upon P&G to set forth in the patent specification additional description of these features to satisfy the definiteness requirement of the second paragraph of 35 U.S.C. § 112. Otherwise, such “desirable” features are hopelessly vague and subjective. One person might consider a given juice product to be too sweet, while another might find it too tart to be enjoyably consumed, even though the recited levels of the beverage’s constituent elements were otherwise met.

IV. COCA-COLA’S PROPOSED CLAIM CONSTRUCTION

In contrast to the result-oriented claim construction advanced by P&G, Coca-Cola submits that, when the language of claim 1 is viewed in its entirety and the intrinsic evidence of record is properly considered, the correct legal interpretation of the phrase “acid component comprising a mixture of citric acid and malic acid in a weight ratio of citric acid:malic acid of from about 5:95 to about 90:10” means the acids naturally present in the base juice and a mixture of citric acid and malic acid discretely added to the base juice in a weight ratio of citric acid:malic acid of from about 5:95 to about 90:10. In light of the representations made by P&G in the ‘847 patent and during prosecution of the ‘847 patent in the U.S. Patent and Trademark Office, this Court should further limit this phrase to require a premix addition of citric acid and malic acid utilized to solubilize the calcium.

The phrase “fruit juice beverage” should mean a fruit juice product which is in a single-strength, ready-to-serve, drinkable form, and does not itself require any specific taste, odor, or appearance.

V. CONCLUSION

In summary, P&G seeks a result-oriented construction of the claims that has little to do with the actual language of the claims it prosecuted and obtained from the U.S. Patent and Trademark Office (PTO) or the intrinsic evidence of record and everything to do with a desire to so contort the scope of its claims that they will cover Coca-Cola’s line of Minute Maid® calcium-supplemented orange juice products. As noted at pages 4-5 of Coca-Cola’s opening brief, Coca-Cola did not appropriate P&G’s approach of using added acids but instead developed its own solution to the problem which utilized the natural acids in the base juice alone -- an approach disparaged and disclaimed by P&G in its patent and during prosecution and one that the PTO found worthy of its own separate patent. Given that Coca-Cola has marketed such juice products since 1986 and P&G has never before advanced its construction against Coca-Cola of such a claim until this suit was brought in 2002, the weakness of P&G’s position is apparent. Accordingly, Coca-Cola respectfully requests this Court construe the terms “acid component comprising a mixture of citric acid and malic acid” and “fruit juice beverage” in the manner set forth above and in its proposed order.

Dated: February 6, 2004

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and accurate copy of THE COCA-COLA COMPANY'S REPLY BRIEF TO THE PROCTER & GAMBLE COMPANY'S OPENING CLAIM CONSTRUCTION BRIEF was served on this 6th day of February, 2004, via Facsimile to Plaintiff's counsel:

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